

The second claim numbered as claim 9, restated here for clarification, is hereby cancelled without prejudice or disclaimer, [9.The method of claim 8, wherein said single function comprises a single click on said computing device.]

Claims 51 through 55 are hereby cancelled without prejudice or disclaimer.

82. A method for transmitting data to selected remote computing devices, comprising the steps of:

transmitting data from an information source to a central broadcast server;
preprocessing said data at said central broadcast server;

5 transmitting preprocessed data to remote receivers communicating with said computing devices;

instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off; and

10 said computing devices using said preprocessed data to access a system that is not controlled by an operator of the central broadcast server.

83. The method claimed in claim 82, wherein said step of transmitting preprocessed data to remote receivers communicating with said computing devices, further comprises the step of: wirelessly transmitting said preprocessed data to remote receivers.

84. The method claimed in claim 83, wherein said step of wirelessly transmitting said preprocessed data to remote receivers further comprises the step of: transmitting said preprocessed data utilizing a paging network.

85. The method claimed in claim 83, wherein said step of wirelessly transmitting said preprocessed data to remote receivers further comprises the step of: transmitting said preprocessed data utilizing a Vertical Blanking Interval.

86. The method claimed in claim 83, wherein said step of wirelessly transmitting said preprocessed data to remote receivers further comprises the step of: transmitting said preprocessed data utilizing a satellite system.

87. The method claimed in claim 82, wherein said step of transmitting preprocessed data to remote receivers communicating with said computing devices, further comprises the step of: transmitting said preprocessed data to remote receivers by wired transmission.

88. The method claimed in claim 82, wherein said step of preprocessing data at said central broadcast server, further comprises the step of: attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic

connection back to said information source for obtaining further information related to said preprocessed data.

5 89. The method claimed in claim 88, wherein said Internet address location is a Uniform Resource Locator.

90. The method claimed in claim 88, wherein said step of attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data, further comprises the step of: providing an automatic connection back to said information source through an user activating a single function on said computing device.

91. The method claimed in claim 89, wherein said single function comprises a single click on said computing device.

92. The method claimed in claim 88, wherein said connection back to said information source for obtaining further information related to said preprocessed data is an automated wired connection.

93. The method claimed in claim 88, wherein said connection back to said information source for obtaining further information related to said preprocessed data is an automated wireless connection.

94. The method claimed in claim 88, wherein said step of attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data, further comprises the step of:

5 determining at said central broadcast server said Internet address location from said information source;

attaching said Internet address location to said preprocessed data;

transmitting said Internet address location with said preprocessed data to said computing device;

10 extracting said Internet address location from said preprocessed data at said computing device; and

displaying said Internet address location with said preprocessed data to said user such that said user can with a single click on said Internet address location to obtain additional information from said information source.

95. The method claimed in claim 94, wherein said step of displaying said Internet address location to said user such that said user can with a single click on said Internet address location to obtain additional information from said information source, further comprising the step of:

5 launching an Internet browser and passing said Internet address location to said browser for automatic connection back to said information source.

96. The method claimed in claim 82, wherein said step of instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises the step of: providing alert means which when activated allows display of data.

97. The method claimed in claim 96, wherein said at least one alert comprises a visual alert.

98. The method claimed in claim 96, wherein said at least one alert comprises an audio alert.

5 99. The method claimed in claim 82, wherein said step of instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises the step of: providing a dockable user interface alert panel on a display communicating with computing device for providing alerts to said user, wherein said alert panel is dockable on top of other applications.

100. The method claimed in claim 99, wherein said step of providing a dockable user interface alert panel on a display communicating with computing device for providing alerts to said user, further comprises the step of: displaying fly-in graphics and icon buttons to alert said user that new data has been received by said computing device.

101. The method claimed in claim 99, wherein said alerts reflect type of information present at computing device.

102. The method claimed in claim 82, wherein said step of preprocessing said data at said central broadcast server further comprises the step of: deriving redundant data packets for transmission to said user.

103. The method claimed in claim 102, wherein said step of deriving redundant data packets for transmission to said user further comprises the step of:

5 parceling a data block into at least one incoming message;

parceling said messages into k information packets;

selecting a number of parity-check packets p;

encoding column-wise with a modified Reed-Solomon code in accordance with:

$$g(x) = \prod_{i=1}^p (x + a^i)$$

10 for generating said parity-check packets; and
parceling said data packets into code words for transmission to said user.

104. The method claimed in claim 103, wherein said data packets include information packets and parity-check packets.

105. The method claimed in claim 103, wherein said step of deriving redundant data packets for transmission to said user further comprises the steps of: performing error correction and detection on said code words after said data packets have been parceled.

106. The method claimed in claim 103, further comprising the step of: assembling a data block from said code words.

107. The method claimed in claim 106, wherein said step of assembling a data block from said code words further comprises the step of:

counting the number of code words which have errors;

determining whether each packet has any errors;

saving packets without error;

discarding packets with at least one error; and

assembling a message when the required number of packets has been received.

108. The method claimed in claim 82, wherein said step of preprocessing said data at said central broadcast server further comprises the step of: combining Huffman compression and the dictionary-based compression based algorithms.

109. The method claimed in claim 108, wherein said step of combining Huffman compression and the dictionary-based compression based algorithms further comprises the steps of:

scanning input texts;

searching for next item previously seen text;

searching for next item in a static Huffman dictionary; and

choosing said search method which produces a better result for compression.

110. The method claimed in claim 109, further comprising the step of: decompressing said compressed data.

111. The method claimed in claim 82, wherein said step of preprocessing said data at said central broadcast server further comprises the step of: utilizing a differencing algorithm for compressing said coded data, thereby significantly reducing the number of bytes sent with each transmission.

112. The method claimed in claim 82, wherein said step of preprocessing data at said central broadcast server, further comprises the step of: processing data in accordance with feed type from said information source.

113. The method claimed in claim 112, wherein said feed type comprises binary type feeds.

114. The method claimed in claim 112, wherein said feed type comprises common user information type feeds.

115. The method claimed in claim 112, wherein said feed type comprises feeds for modifying registry keys which control processing of data.

116. The method claimed in claim 114, wherein said step of processing data in accordance with feed type from said information source, further comprises the step of: using tags to differentiate types of information.

117. The method claimed in claim 82, wherein said step of instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises the step of: instantaneously alerting said user to personal alerts through the use of sound, graphics, bit maps or video, wherein said user can instantaneously access information.

118. The method claimed in claim 82, wherein said step of preprocessing data at said central broadcast server, further comprises the step of: encoding said data with information relating to message parameters for filtering.

119. The method claimed in claim 82, wherein said step of instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises the steps of:

monitoring said transmissions utilizing multiple viewers;
filtering said transmitted preprocessed data;
post processing said preprocessed data; and
notifying said user instantaneously of receipt of filtered postprocessed data.

120. The method claimed in claim 119, wherein said step of filtering said transmitted preprocessed data further comprises the step of: filtering said transmitted preprocessed data in accordance with preferences set by said user.

121. The method claimed in claim 120, wherein said step of filtering said transmitted preprocessed data in accordance with preferences set by said user, further comprises the step of: setting said preferences with respect to sound, video and animation.

122. The method claimed in claim 119, wherein said step of filtering said transmitted preprocessed data further comprises the step of: filtering said preprocessed data in accordance with virtual addresses.

123. The method claimed in claim 119, wherein said step of filtering said transmitted preprocessed data further comprises the step of: filtering said preprocessed data in accordance with physical addresses.

124. The method claimed in claim 119, further comprising the step of: controlling said viewers from said central broadcast server.

125. The method claimed in claim 119, further comprising the step of: activating said preprocessed data at a scheduled time.

126. The method claimed in claim 82, further comprising the step of: modifying said preprocessed data instantaneously and wirelessly.

127. The method claimed in claim 126, wherein said step of modifying said preprocessed data instantaneously and wirelessly, further comprises the step of: activating services wirelessly through activation codes which enable or disable services.

128. The method claimed in claim 120, wherein said step of controlling said viewers from said central broadcast server, further comprises the step of: adding viewers from said central broadcast server.

129. The method claimed in claim 124, wherein said step of controlling said viewers from said central broadcast server, further comprises the step of: removing viewers from said central broadcast server.

130. The method claimed in claim 119, wherein said step of postprocessing said preprocessed data, further comprises the step of: recombining, decoding and decompressing said preprocessed data.

131. The method claimed in claim 82, wherein said information source may be an Internet access provider providing data feeds.

132. The method claimed in claim 82, wherein said information source may be an on-line service provider providing data feeds.

133. The method claimed in claim 82, further comprising the step of: displaying contextual graphics on said computing device to show data in a predefined format.

134. The method claimed in claim 133, wherein said predefined format is a scoreboard.

135. The method claimed in claim 82, wherein said step of preprocessing data at said central broadcast server, further comprises the step of: attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user a message that causes a process or transaction on said computing device to occur.

136. The method claimed in claim 88, wherein said Internet address is a proprietary on-line addressing scheme.

137. The method claimed in claim 83, wherein said step of wirelessly transmitting said preprocessed data to remote receivers further comprises the step of: transmitting said preprocessed data utilizing a FM subcarrier, digital, analog, cellular, GSM or PCS carrier.

138. The method claimed in claim 82, wherein said step of preprocessing said data at said central broadcast server, further comprises the step of: sending said data on groups of pooled capcodes.

139. The method claimed in claim 138, wherein said step of sending said data on groups of pooled capcodes, further comprises the step of: multiplexing data over multiple capcodes to be reassembled at said user as if data were being sent over a single capcode.

140. The method claimed in claim 82, wherein said step of preprocessing said data at said central broadcast server, further comprises the step of:

5 assigning data packets to a group of capcodes;
transmitting said data over a paging network using said group of capcodes;
receiving packets at said user on said group of capcodes; and
combining said packets from group of capcodes into one data message.

141. A system for transmitting data to selected remote computing devices, comprising:
means for transmitting data from an information source to a central broadcast server;
means for preprocessing said data at said central broadcast server;
means for transmitting preprocessed data to remote receivers communicating with said

5 computing devices;
means for instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off; and
means for said computing devices to use said preprocessed data to access a system that is not controlled by an operator of the central broadcast server.

142. The system claimed in claim 141, wherein said means for transmitting preprocessed data to remote receivers communicating with said computing devices, further comprises: means for wirelessly transmitting said preprocessed data to remote receivers.

143. The system claimed in claim 142, wherein said means for wirelessly transmitting said preprocessed data to remote receivers further comprises: means for transmitting said preprocessed data utilizing a paging network.

144. The system claimed in claim 142, wherein said means for wirelessly transmitting said preprocessed data to remote receivers further comprises: means for transmitting said preprocessed data utilizing a Vertical Blanking Interval.

145. The system claimed in claim 142, wherein said means for wirelessly transmitting said preprocessed data to remote receivers further comprises: means for transmitting said preprocessed data utilizing a satellite system.

146. The system claimed in claim 141, wherein said means for transmitting preprocessed data to remote receivers communicating with said computing devices, further comprises: means for transmitting said preprocessed data to remote receivers by wired transmission.

147. The system claimed in claim 141, wherein said means for preprocessing data at said central broadcast server, further comprises: means for attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data.

148. The system claimed in claim 147, wherein said Internet address location is a Uniform Resource Locator.

149. The system claimed in claim 147, wherein said means for attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data, further comprises: means for providing an automatic connection back to said information source through an user activating a single function on said computing device.

150. The system claimed in claim 149, wherein said single function comprises a single click on said computing device.

151. The system claimed in claim 147, wherein said connection back to said information source for obtaining further information related to said preprocessed data is an automated wired connection.

152. The system claimed in claim 147, wherein said connection back to said information source for obtaining further information related to said preprocessed data is an automated wireless connection.

153. The system claimed in claim 147, wherein said means for attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data, further comprises:

5 means for determining at said central broadcast server said Internet address location from said information source;

means for attaching said Internet address location to said preprocessed data;

means for transmitting said Internet address location with said preprocessed data to said computing device;

10 means for extracting said Internet address location from said preprocessed data at said computing device; and

means for displaying said Internet address location with said preprocessed data to said user such that said user can with a single click on said Internet address location to obtain additional information from said information source.

154. The system claimed in claim 153, wherein said means for displaying said Internet address location to said user such that said user can with a single click on said Internet address location to obtain additional information from said information source, further comprises: means for launching an Internet browser and passing said Internet address location to said browser for automatic connection back to said information source.

155. The system claimed in claim 141, wherein said means for instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises: alert means which when activated allows display of data.

156. The system claimed in claim 141, wherein said means for preprocessing said data at said central broadcast server, further comprises: means for sending said data on groups of pooled capcodes.

157. The system claimed in claim 156, wherein said means for sending said data on groups of pooled capcodes, further comprises: means for multiplexing data over multiple capcodes to be reassembled at said user as if data were being sent over a single capcode.

158. The system claimed in claim 141, wherein said means for preprocessing said data at said central broadcast server, further comprises:

means for assigning data packets to a group of capcodes;

means for transmitting said data over a paging network using said group of capcodes;

means for receiving packets at said user on said group of capcodes;

means for combining said packets from group of capcodes into one data message.

159. The method claimed in claim 89, wherein said single function comprises a single click on said computing device.

160. The method claimed in claim 159, wherein said computing device comprises a computer.

161. A method for transmitting data to selected remote computing devices, comprising the steps of:

transmitting data from an information source to a central broadcast server;
preprocessing said data at said central broadcast server;

5 transmitting preprocessed data to remote receivers communicating with said remote computing devices;

notifying said remote computing devices of receipt of said preprocessed data; and

said computing devices using said preprocessed data to access a system that is not controlled by an operator of the central broadcast server.

162. The method claimed in claim 161 wherein the step of notifying said remote computing devices includes instantaneously notifying said computing devices.

163. The method claimed in claim 161 wherein the step of notifying said remote computing devices of receipt of preprocessed data includes instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on-line or off-line.

164. The method claimed in claim 161 wherein the step of preprocessing said data further comprises providing data to one or more servers in said central broadcast server and parsing said data with parsers corresponding to said servers.

165. The method claimed in claim 164 wherein said parsers include parsers that are specialized to a particular data feed of information.

166. The method claimed in claim 164 wherein said parsers include stock quote parsers.

167. The method claimed in claim 164 wherein said parsers include weather parsers.

168. The method claimed in claim 164 wherein said parsers include lotto parsers.

169. The method claimed in claim 164 wherein said parsers include mail parsers.

170. The method claimed in claim 164 wherein said parsers include sports parsers.

171. The method claimed in claim 164 wherein said parsers include news parsers.

VERSION WITH MARKINGS TO SHOW CHANGES MADE

The second claim numbered as claim 9, restated here for clarification, is hereby cancelled without prejudice or disclaimer, **[9. The method of claim 8, wherein said single function comprises a single click on said computing device.]**

Claims 51 through 55 are hereby cancelled without prejudice or disclaimer.

[178] 82. A method for transmitting data to selected remote computing devices, comprising the steps of:

transmitting data from an information source to a central broadcast server;
preprocessing said data at said central broadcast server;

5 transmitting preprocessed data to remote receivers communicating with said computing devices; **[and]**

instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off; **and**

10 **said computing devices using said preprocessed data to access a system that is not controlled by an operator of the central broadcast server.**

[179] 83. The method claimed in claim **[178] 82**, wherein said step of transmitting preprocessed data to remote receivers communicating with said computing devices, further comprises the step of: wirelessly transmitting said preprocessed data to remote receivers.

[180] 84. The method claimed in claim **[179] 83**, wherein said step of wirelessly transmitting said preprocessed data to remote receivers further comprises the step of: transmitting said preprocessed data utilizing a paging network.

[181] 85. The method claimed in claim **[179] 83**, wherein said step of wirelessly transmitting said preprocessed data to remote receivers further comprises the step of: transmitting said preprocessed data utilizing a Vertical Blanking Interval.

[182] 86. The method claimed in claim **[179] 83**, wherein said step of wirelessly transmitting said preprocessed data to remote receivers further comprises the step of: transmitting said preprocessed data utilizing a satellite system.

[183] 87. The method claimed in claim **[178] 82**, wherein said step of transmitting preprocessed data to remote receivers communicating with said computing devices, further comprises the step of: transmitting said preprocessed data to remote receivers by wired transmission.

[184] 88. The method claimed in claim [178] 82, wherein said step of preprocessing data at said central broadcast server, further comprises the step of: attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data.

5 [185] 89. The method claimed in claim [184] 88, wherein said Internet address location is a Uniform Resource Locator.

[186] 90. The method claimed in claim [184] 88, wherein said step of attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data, further comprises the step of: providing an automatic connection back to said information source through an user activating a single function on said computing device.

5 [187] 91. The method claimed in claim [185] 89, wherein said single function comprises a single click on said computing device.

[188] 92. The method claimed in claim [184] 88, wherein said connection back to said information source for obtaining further information related to said preprocessed data is an automated wired connection.

[189] 93. The method claimed in claim [184] 88, wherein said connection back to said information source for obtaining further information related to said preprocessed data is an automated wireless connection.

[190] 94. The method claimed in claim [184] 88, wherein said step of attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data, further comprises the step of:

5 determining at said central broadcast server said Internet address location from said information source;

attaching said Internet address location to said preprocessed data;

transmitting said Internet address location with said preprocessed data to said computing device;

10 extracting said Internet address location from said preprocessed data at said computing device; and

displaying said Internet address location with said preprocessed data to said user such that said user can with a single click on said Internet address location to obtain additional information from said information source.

5 [191] 95. The method claimed in claim [190] 94, wherein said step of displaying said Internet address location to said user such that said user can with a single click on said Internet address location obtain additional information from said information source, further comprising the step of: launching an Internet browser and passing said Internet address location to said browser for automatic connection back to said information source.

[192] 96. The method claimed in claim [178] 82, wherein said step of instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises the step of: providing alert means which when activated allows display of data.

[193] 97. The method claimed in claim [192] 96, wherein said at least one alert comprises a visual alert.

[194] 98. The method claimed in claim [192] 96, wherein said at least one alert comprises an audio alert.

5 [195] 99. The method claimed in claim [178] 82, wherein said step of instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises the step of: providing a dockable user interface alert panel on a display communicating with computing device for providing alerts to said user, wherein said alert panel is dockable on top of other applications.

[196] 100. The method claimed in claim [195] 99, wherein said step of providing a dockable user interface alert panel on a display communicating with computing device for providing alerts to said user, further comprises the step of: displaying fly-in graphics and icon buttons to alert said user that new data has been received by said computing device.

[197] 101. The method claimed in claim [195] 99, wherein said alerts reflect type of information present at computing device.

[198] 102. The method claimed in claim [178] 82, wherein said step of preprocessing said data at said central broadcast server further comprises the step of: deriving redundant data packets for transmission to said user.

5 [199] 103. The method claimed in claim [198] 102, wherein said step of deriving redundant data packets for transmission to said user further comprises the step of:

parceling a data block into at least one incoming message;

parceling said messages into k information packets;

selecting a number of parity-check packets p;

encoding column-wise with a modified Reed-Solomon code in accordance with:

$$g(x) = \prod_{i=1}^p (x + a^i)$$

10 for generating said parity-check packets; and
parceling said data packets into code words for transmission to said user.

[200] 104. The method claimed in claim **[199] 103**, wherein said data packets include information packets and parity-check packets.

[201] 105. The method claimed in claim **[199] 103**, wherein said step of deriving redundant data packets for transmission to said user further comprises the steps of: performing error correction and detection on said code words after said data packets have been parceled.

[202] 106. The method claimed in claim **[199] 103**, further comprising the step of: assembling a data block from said code words.

[203] 107. The method claimed in claim **[202] 106**, wherein said step of assembling a data block from said code words further comprises the step of:

- counting the number of code words which have errors;
- determining whether each packet has any errors;
- 5 saving packets without error;
- discarding packets with at least one error; and
- assembling a message when the required number of packets has been received.

[204] 108. The method claimed in claim **[178] 82**, wherein said step of preprocessing said data at said central broadcast server further comprises the step of: combining Huffman compression and the dictionary-based compression based algorithms.

[205] 109. The method claimed in claim **[204] 108**, wherein said step of combining Huffman compression and the dictionary-based compression based algorithms further comprises the steps of:

- scanning input texts;
- 5 searching for next item previously seen text;
- searching for next item in a static Huffman dictionary; and
- choosing said search method which produces a better result for compression.

[206] 110. The method claimed in claim **[205] 109**, further comprising the step of: decompressing said compressed data.

[207] 111. The method claimed in claim **[178] 82**, wherein said step of preprocessing said data at said central broadcast server further comprises the step of: utilizing a differencing algorithm for compressing said coded data, thereby significantly reducing the number of bytes sent with each transmission.

[208] 112. The method claimed in claim [178] 82, wherein said step of preprocessing data at said central broadcast server, further comprises the step of: processing data in accordance with feed type from said information source.

[209] 113. The method claimed in claim [208] 112, wherein said feed type comprises binary type feeds.

[210] 114. The method claimed in claim [208] 112, wherein said feed type comprises common user information type feeds.

[211] 115. The method claimed in claim [208] 112, wherein said feed type comprises feeds for modifying registry keys which control processing of data.

[212] 116. The method claimed in claim [210] 114, wherein said step of processing data in accordance with feed type from said information source, further comprises the step of: using tags to differentiate types of information.

5 [213] 117. The method claimed in claim [178] 82, wherein said step of instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises the step of: instantaneously alerting said user to personal alerts through the use of sound, graphics, bit maps or video, wherein said user can instantaneously access information.

[214] 118. The method claimed in claim [178] 82, wherein said step of preprocessing data at said central broadcast server, further comprises the step of: encoding said data with information relating to message parameters for filtering.

5 [215] 119. The method claimed in claim [178] 82, wherein said step of instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises the steps of:

monitoring said transmissions utilizing multiple viewers;
filtering said transmitted preprocessed data;
post processing said preprocessed data; and
notifying said user instantaneously of receipt of filtered postprocessed data.

[216] 120. The method claimed in claim [215] 119, wherein said step of filtering said transmitted preprocessed data further comprises the step of: filtering said transmitted preprocessed data in accordance with preferences set by said user.

[217] 121. The method claimed in claim [216] 120, wherein said step of filtering said transmitted preprocessed data in accordance with preferences set by said user, further comprises the step of: setting said preferences with respect to sound, video and animation.

[218] 122. The method claimed in claim [215] 119, wherein said step of filtering said transmitted preprocessed data further comprises the step of: filtering said preprocessed data in accordance with virtual addresses.

[219] 123. The method claimed in claim [215] 119, wherein said step of filtering said transmitted preprocessed data further comprises the step of: filtering said preprocessed data in accordance with physical addresses.

[220] 124. The method claimed in claim [215] 119, further comprising the step of: controlling said viewers from said central broadcast server.

[221] 125. The method claimed in claim [215] 119, further comprising the step of: activating said preprocessed data at a scheduled time.

[222] 126. The method claimed in claim [178] 82, further comprising the step of: modifying said preprocessed data instantaneously and wirelessly.

[223] 127. The method claimed in claim [218] 126, wherein said step of modifying said preprocessed data instantaneously and wirelessly, further comprises the step of: activating services wirelessly through activation codes which enable or disable services.

[224] 128. The method claimed in claim [216] 120, wherein said step of controlling said viewers from said central broadcast server, further comprises the step of: adding viewers from said central broadcast server.

[225] 129. The method claimed in claim [220] 124, wherein said step of controlling said viewers from said central broadcast server, further comprises the step of: removing viewers from said central broadcast server.

[226] 130. The method claimed in claim [215] 119, wherein said step of postprocessing said preprocessed data, further comprises the step of: recombining, decoding and decompressing said preprocessed data.

[227] 131. The method claimed in claim [178] 82, wherein said information source may be an Internet access provider providing data feeds.

[228] 132. The method claimed in claim [178] 82, wherein said information source may be an on-line service provider providing data feeds.

[229] 133. The method claimed in claim [178] 82, further comprising the step of: displaying contextual graphics on said computing device to show data in a predefined format.

[230] 134. The method claimed in claim [229] 133, wherein said predefined format is a scoreboard.

[231] 135. The method claimed in claim [178] 82, wherein said step of preprocessing data at said central broadcast server, further comprises the step of: attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user a message that causes a process or transaction on said computing device to occur.

[232] 136. The method claimed in claim [184] 88, wherein said Internet address is a proprietary on-line addressing scheme.

[233] 137. The method claimed in claim [179] 83, wherein said step of wirelessly transmitting said preprocessed data to remote receivers further comprises the step of: transmitting said preprocessed data utilizing a FM subcarrier, digital, analog, cellular, GSM or PCS carrier.

[234] 138. The method claimed in claim [178] 82, wherein said step of preprocessing said data at said central broadcast server, further comprises the step of: sending said data on groups of pooled capcodes.

[235] 139. The method claimed in claim [234] 138, wherein said step of sending said data on groups of pooled capcodes, further comprises the step of: multiplexing data over multiple capcodes to be reassembled at said user as if data were being sent over a single capcode.

[236] 140. The method claimed in claim [178] 82, wherein said step of preprocessing said data at said central broadcast server, further comprises the step of:

5 assigning data packets to a group of capcodes;
transmitting said data over a paging network using said group of capcodes;
receiving packets at said user on said group of capcodes; and
combining said packets from group of capcodes into one data message.

[237] 141. A system for transmitting data to selected remote computing devices, comprising:

means for transmitting data from an information source to a central broadcast server;
means for preprocessing said data at said central broadcast server;

5 means for transmitting preprocessed data to remote receivers communicating with said computing devices; and

means for instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off; and

10 means for said computing devices to use said preprocessed data to access a system that is not controlled by an operator of the central broadcast server.

[238] 142. The system claimed in claim [237] 141, wherein said means for transmitting preprocessed data to remote receivers communicating with said computing devices, further comprises: means for wirelessly transmitting said preprocessed data to remote receivers.

[239] 143. The system claimed in claim [238] 142, wherein said means for wirelessly transmitting said preprocessed data to remote receivers further comprises: means for transmitting said preprocessed data utilizing a paging network.

[240] 144. The system claimed in claim [238] 142, wherein said means for wirelessly transmitting said preprocessed data to remote receivers further comprises: means for transmitting said preprocessed data utilizing a Vertical Blanking Interval.

[241] 145. The system claimed in claim [238] 142, wherein said means for wirelessly transmitting said preprocessed data to remote receivers further comprises: means for transmitting said preprocessed data utilizing a satellite system.

[242] 146. The system claimed in claim [237] 141, wherein said means for transmitting preprocessed data to remote receivers communicating with said computing devices, further comprises: means for transmitting said preprocessed data to remote receivers by wired transmission.

[243] 147. The system claimed in claim [237] 141, wherein said means for preprocessing data at said central broadcast server, further comprises: means for attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data.

[244] 148. The system claimed in claim [243] 147, wherein said Internet address location is a Uniform Resource Locator.

[245] 149. The system claimed in claim [243] 147, wherein said means for attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data, further comprises: means for providing an automatic connection back to said information source through an user activating a single function on said computing device.

[246] 150. The system claimed in claim [245] 149, wherein said single function comprises a single click on said computing device.

[247] 151. The system claimed in claim [243] 147, wherein said connection back to said information source for obtaining further information related to said preprocessed data is an automated wired connection.

[248] 152. The system claimed in claim [243] 147, wherein said connection back to said information source for obtaining further information related to said preprocessed data is an automated wireless connection.

[249] 153. The system claimed in claim [243] 147, wherein said means for attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user an automatic connection back to said information source for obtaining further information related to said preprocessed data, further comprises:

- 5 means for determining at said central broadcast server said Internet address location from said information source;
- means for attaching said Internet address location to said preprocessed data;
- means for transmitting said Internet address location with said preprocessed data to said computing device;
- 10 means for extracting said Internet address location from said preprocessed data at said computing device; and
- means for displaying said Internet address location with said preprocessed data to said user such that said user can with a single click on said Internet address location to obtain additional information from said information source.

[250] 154. The system claimed in claim [249] 153, wherein said means for displaying said Internet address location to said user such that said user can with a single click on said Internet address location to obtain additional information from said information source, further comprises: means for launching an Internet browser and passing said Internet address location to said browser for automatic connection back to said information source.

[251] 155. The system claimed in claim [237] 141, wherein said means for instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on or off, further comprises: alert means which when activated allows display of data.

[252] 156. The system claimed in claim [237] 141, wherein said means for preprocessing said data at said central broadcast server, further comprises: means for sending said data on groups of pooled capcodes.

[253] 157. The system claimed in claim [252] 156, wherein said means for sending said data on groups of pooled capcodes, further comprises: means for multiplexing data over multiple capcodes to be reassembled at said user as if data were being sent over a single capcode.

[254] 158. The system claimed in claim [237] 141, wherein said means for preprocessing said data at said central broadcast server, further comprises:

means for assigning data packets to a group of capcodes;
means for transmitting said data over a paging network using said group of capcodes;
means for receiving packets at said user on said group of capcodes;
means for combining said packets from group of capcodes into one data message.

5 [255] 159. The method claimed in claim [185] 89, wherein said single function comprises a single click on said computing device.

[256] 160. The method claimed in claim [255] 159, wherein said computing device comprises a computer.

[257] 161. A method for transmitting data to selected remote computing devices, comprising the steps of:

transmitting data from an information source to a central broadcast server;
5 preprocessing said data at said central broadcast server;
transmitting preprocessed data to remote receivers communicating with said remote computing devices; [and]
notifying said remote computing devices of receipt of said preprocessed data; and
said computing devices using said preprocessed data to access a system that is not controlled by an operator of the central broadcast server.

[258] 162. The method claimed in claim [257] 161 wherein the step of notifying said remote computing devices includes instantaneously notifying said computing devices.

[259] 163. The method claimed in claim [257] 161 wherein the step of notifying said remote computing devices of receipt of preprocessed data includes instantaneously notifying said computing devices of receipt of said preprocessed data whether said computing devices are on-line or off-line.

[260] 164. The method claimed in claim [257] 161 wherein the step of preprocessing said data further comprises providing data to one or more servers in said central broadcast server and parsing said data with parsers corresponding to said servers.

[261] 165. The method claimed in claim [260] 164 wherein said parsers include parsers that are specialized to a particular data feed of information.

[262] 166. The method claimed in claim [260] 164 wherein said parsers include stock quote parsers.

[263] 167. The method claimed in claim [260] 164 wherein said parsers include weather parsers.

[264] 168. The method claimed in claim [260] 164 wherein said parsers include lotto parsers.

[265] 169. The method claimed in claim [260] 164 wherein said parsers include mail parsers.

[266] 170. The method claimed in claim [260] 164 wherein said parsers include sports parsers.

[267] 171. The method claimed in claim [260] 164 wherein said parsers include news parsers.

[268] 172. The method claimed in claim [257] 161 wherein the step of preprocessing said data further comprises transmitting said data to a content manager for determining how said data is handled.

[269] 173. The method claimed in claim [268] 172 further including transmitting said data from said content manager to an information gateway for building data stocks and assigning addresses to said data blocks.

[270] 174. The method claimed in claim [269] 173 further including transmitting said data from said content manager to an information gateway for preparing said data blocks for transmission to receivers.

[271] 175. The method claimed in claim [269] 173 wherein said step of transmitting said data from said content manager to said information gateway for building data blocks and assigning addresses to said data block, further comprises the step of: building data blocks and assigning addresses to said data block based on information in a subscriber database.

[272] 176. A method for transmitting data to selected electronic devices, comprising the steps of:

transmitting data from an information source to a central broadcast server;

preprocessing said data at said central broadcast server;

transmitting preprocessed data to receivers communicating with said electronic devices;

5 [and]

notifying said electronic devices of receipt of said preprocessed data; and

said electronic devices using said preprocessed data to access a system that is not controlled by an operator of the central broadcast server

[273] 177. The method claimed in claim [272] 176 wherein the electronic devices includes electronic devices with computing capabilities.

[274] 178. The method claimed in claim [272] 176 wherein the electronic devices include consumer electronic devices.